

CUMULATIVE INDEXES

CONTRIBUTING AUTHORS, VOLUMES 45-55

A

- Aeschbacher RA, 45:25-45
Ainsworth EA, 55:557-94
Ait-ali T, 52:67-88
Alban C, 51:17-47
Albersheim P, 55:109-39
Allen GJ, 52:627-58
Alonso-Blanco C, 49:345-70;
 55:141-72
Apel K, 55:373-99
Argüello-Astorga G,
 49:525-55
Armburst EV, 46:21-44
Arroyo A, 49:453-80
Asada K, 50:601-39

B

- Badger MR, 45:369-92
Baldwin IT, 53:299-328
Ball SG, 54:207-33
Baluška F, 51:289-322
Banks JA, 50:163-86
Barber J, 48:641-71
Barkla BJ, 47:159-84
Barlow PW, 51:289-322
Bartel B, 48:51-66
Bartels D, 47:377-403
Bartley GE, 45:287-301
Barton MK, 48:673-701
Baucher M, 54:519-46
Bauer CE, 53:503-21
Bender J, 55:41-68
Benfey PN, 45:25-45;
 50:505-37
Benning C, 49:53-75
Benson AA, 53:1-25
Benveniste P, 55:429-57
Berthold DA, 54:497-517
Bevan MW, 49:127-50

Bick J-A, 51:141-66

- Binns AN, 45:173-96
Birch RG, 48:297-326
Blevins DG, 49:481-500
Boekema EJ, 48:641-71
Boerjan W, 54:519-46
Bogdanove AJ, 54:23-61
Bohnert HJ, 50:305-32;
 51:463-99
Boller T, 46:189-214
Bonner J, 45:1-23
Boosirichai K, 53:421-47
Boston RS, 52:785-816
Bowler C, 53:109-30
Brennicke A, 45:61-78
Bressan RA, 51:463-99
Breton G, 55:263-88
Briat J-F, 54:183-206
Briggs WR, 45:143-71
Britt AB, 47:75-100
Broadvest J, 49:1-24
Brown JWS, 49:77-95
Brown ML, 54:403-30
Brownlee C, 55:401-27
Buckler ES IV, 54:357-74
Burris RH, 46:1-19
Bush DS, 46:95-122

C

- Cahoon EB, 49:611-41
Campbell AM, 46:21-44
Campbell WH, 50:277-303
Canaani O, 45:493-526
Canny MJ, 46:215-36
Carpita NC, 47:445-76
Cashmore AR, 46:445-74
Caspari T, 47:595-626
Cassab GI, 49:281-309
Chandler PM, 45:113-41

Chandra S, 45:609-31

- Chang C-j, 45:663-74
Chappell J, 46:521-47
Chapple C, 49:311-43
Chen R, 53:421-47
Chitnis PR, 52:593-626
Chollet R, 47:273-98
Christiansen J, 52:269-95
Citovsky V, 48:27-50
Clouse SD, 49:427-51
Cobbett C, 53:159-82
Cohen A, 46:147-66
Comai L, 54:375-401
Conklin PL, 52:437-67
Coruzzi GM, 47:569-93
Coschigano KT,
 47:569-93
Cosgrove DJ, 50:391-417
Cournac L, 53:523-50
Cramer WA, 47:477-508
Creelman RA, 48:355-81
Croteau R, 52:689-724
Cunningham FX Jr,
 49:557-83
Curie C, 54:183-206
Curran AC, 51:433-62
Cushman JC, 50:305-32

D

- Danon A, 46:147-66
Darvill AG, 55:109-39
Das OP, 45:79-112
Davenport RJ, 53:67-107
Davies JP, 51:141-66
Dawe RK, 49:371-95
Day DA, 48:493-523
Dean C, 46:395-418
Dean DR, 52:269-95
Delhaize E, 52:527-60

DellaPenna D, 50:133-61

Delmer DP, 50:245-76

Demidchik V, 53:67-107

Deng X-W, 47:215-43;
54:165-82

Dennis ES, 49:223-47

Denyer K, 48:67-87

de Souza MP, 51:401-32

Dewitte W, 54:235-64

Dietrich MA, 49:501-23

Dietz K-S, 54:93-107

Diner BA, 53:551-80

Dixon RA, 48:251-75;
55:225-61

Douce R, 51:17-47

Drake BG, 48:609-39

Drew MC, 48:223-50

Dreyfuss BW, 49:25-51

Drozdowicz YM,
49:727-60

Durnford DG, 47:685-714

E

Edwards GE, 55:173-96

Elliott KA, 53:131-58

Elthon TE, 55:23-39

Emes MJ, 51:111-40

Epstein E, 50:641-64

Evans LT, 54:1-21, 307-28

Evans MMS, 48:673-701

Evron Y, 51:83-109

F

Facchini PJ, 52:29-66

Fagard M, 51:167-94

Falciaiore A, 53:109-30

Falkowski PG, 45:633-62

Ferl RJ, 47:49-73

Ferris PJ, 46:21-44

Feussner I, 53:275-97

Finnegan EJ, 49:223-47

Fletcher JC, 53:45-66

Flint-Garcia SA, 54:357-74

Flügge U-I, 50:27-45

Forde BG, 53:203-24

Fox TC, 49:669-96

Foyer CH, 49:249-79

Franceschi VR, 55:173-96

Frommer WB, 46:419-44;
55:341-71

Fry SC, 46:497-520

Fujioka S, 54:137-64

Fukayama H, 52:297-314

Fukuda H, 47:299-325

Furbank RT, 52:297-314

Furumoto T, 55:69-84

Furuya M, 55:1-21

G

Galili G, 53:27-43

Galway ME, 54:691-722

Ganti E, 49:557-83

García-Mata C,

54:109-36

Gasser C, 49:1-24

Gatenby AA, 45:469-91

Gatz C, 48:89-108

Geiger DR, 45:235-56

Gelvin SB, 51:223-56

Genger RK, 49:233-47

Ghoshroy S, 48:27-50

Gibbs M, 50:1-25

Gilroy S, 48:165-90

Giovannoni J, 52:725-49

Giraudat J, 49:199-222

Giuliano G, 45:287-301

Golden SS, 48:327-54

Goldsborough P, 53:159-82

Gonzalez-Carranza ZH,

53:131-58

González-Meler MA,

48:609-39

Goodenough UW,

46:21-44

Graziano M, 54:109-36

Green BR, 47:685-714

Green PJ, 45:421-45

Greenberg JT, 48:525-45

Grossman A, 52:163-210

Grossniklaus U, 54:547-74

Grusak MA, 50:133-61

Guan C, 53:421-47

Gubler F, 55:197-223

Guerinot ML, 49:669-96

HHammond-Kosack KE,
48:575-607

Hankamer B, 48:641-71

Hanson AD, 52:119-37

Harada JJ, 46:123-46

Harberd NP, 52:67-88

Hardie DG, 50:97-131

Harmon A, 55:263-88

Harper JF, 51:433-62;
55:263-88

Harris EH, 52:363-406

Harrison MJ, 50:361-89

Hasegawa PM, 51:463-99

Hashimoto T, 45:257-85

Hauser B, 49:1-24

Hedden P, 48:431-60

Heinstein PF, 45:663-74

Henderson JHM, 52:1-28

Henikoff S, 54:375-401

Hepler PK, 48:461-91

Herrera-Estrella L,

49:525-55

Herrmann KM, 50:473-503

Hetherington AM, 55:401-27

Hirt H, 55:373-99

Hoekenga OA, 55:459-93

Holland MA, 45:197-209

Hörtensteiner S, 50:67-95

Horton P, 47:655-84

Huang D, 47:477-508

Huber JL, 47:431-44

Huber SC, 47:431-44

Hudson A, 51:349-70

Hugouvieux V, 52:627-58

Humphries S, 45:633-62

Huner NPA, 54:329-55

Hunt AG, 45:47-60

Huppe HC, 45:577-607

Hwang I, 51:433-62

I

Iba K, 53:225-45

Ingram J, 47:377-403

Ishii T, 55:109-39

Ishiura M, 48:327-54

Izui K, 55:69-84

J

- Jacobs TW, 46:317-39
 Jacquot J-P, 51:371-400
 Jaworski JG, 48:109-36
 Job D, 51:17-47
 John P, 47:245-71
 Johnson CH, 48:327-54
 Johnson EA, 51:83-109
 Jones AM, 45:393-420
 Jones DL, 52:527-60
 Jones JDG, 48:575-607

K

- Kader J-C, 47:627-54
 Kagawa T, 54:455-68
 Kai Y, 55:69-84
 Kakimoto T, 54:605-27
 Kamiya Y, 48:431-60
 Kaplan A, 50:539-70
 Kato N, 55:537-54
 Kerfeld CA, 49:397-425
 Kessler A, 53:299-328
 Kieber JJ, 48:277-96
 King KE, 52:67-88
 King RW, 54:307-28
 Kinney AJ, 52:335-61
 Kleczkowski LA, 45:339-67
 Koch KE, 47:509-40
 Kochian L, 55:459-93
 Kochian LV, 46:237-60
 Koltunow AM, 54:547-74
 Komed Y, 55:521-35
 Kondo T, 48:327-54
 Koornneef M, 49:345-70;
 55:141-72
 Kotani H, 49:151-71
 Krogmann DW, 49:397-425
 Krömer S, 46:45-70
 Kwak JM, 52:627-58
 Kyozuka J, 53:399-419

L

- Lalonde S, 55:341-71
 Lam E, 55:537-54
 Lam H-M, 47:569-93
 Lamattina L, 54:109-36
 Lamb C, 48:251-75

- Larkin JC, 54:403-30
 Lartey R, 48:27-50
 Leigh RA, 50:447-72
 Leon P, 49:453-80
 Leuchtmann A, 55:315-40
 Leung J, 49:199-222
 Leustek T, 51:141-66
 Leyser O, 53:377-98
 Li Z-S, 49:727-60
 Liang F, 51:433-62
 Lichtenthaler HK, 50:47-65
 Lin C, 54:469-96
 Loewus FA, 52:437-67
 Long SP, 45:633-62;
 48:609-39; 55:557-94
 Low PS, 45:609-31
 Lu Y-P, 49:727-60
 Luan S, 54:63-92
 Lukaszewski KM,
 49:481-500
- M**
- MacKay JJ, 49:585-609
 Mackenzie S, 49:453-80
 MacMillan J, 47:1-21
 Maeshima M, 52:469-97
 Maliga P, 55:289-313
 Malkin S, 45:493-526
 Mandoli DF, 49:173-98
 Marks MD, 48:137-63
 Marrs KA, 47:127-58
 Martin C, 48:67-87
 Martin GB, 54:23-61
 Martin MN, 51:141-66
 Martinez SE, 47:477-508
 Martinoia E, 45:447-67;
 49:727-60
 Masson PH, 53:421-47
 Matile P, 50:67-95
 Matsumura H, 55:69-84
 Matsuoka M, 52:297-314
 Maurel C, 48:399-429
 Mayfield SP, 46:147-66
 McAndrew RS, 52:315-33
 McCarty DR, 46:71-93
 McCarty RE, 51:83-109
 McClung CR, 52:139-62

- McCourt P, 50:219-43
 McCully ME, 50:695-718
 McCurdy DW, 54:431-54
 McIntosh L, 48:703-34
 Meijer HJG, 54:265-306
 Meinke DW, 46:369-94
 Melo-Oliveira R, 47:569-93
 Merchant S, 49:25-51
 Messing J, 45:79-112
 Meyer P, 47:23-48
 Miernyk JA, 53:357-75
 Miller AJ, 52:659-88
 Miyao M, 52:297-314
 Mok DWS, 52:89-118
 Mok MC, 52:89-118
 Møller IM, 52:561-91
 Mooney BP, 53:357-75
 Moore AL, 45:545-75
 Moore G, 51:195-222
 Moore I, 46:261-88
 Morell MK, 54:207-33
 Mullet JE, 48:355-81
 Munnik T, 54:265-306
 Murata N, 47:541-68
 Murray JAH, 54:235-64

N

- Nagy F, 53:329-55
 Nelson O, 46:475-96
 Neuhaus HE, 51:111-40
 Nielsen K, 52:785-816
 Ninnemann O, 46:419-44
 Nishida I, 47:541-68
 Niogi KK, 50:333-59
 Noctor G, 49:249-79

O

- Oaks A, 51:1-16
 Offer CE, 54:431-54
 Ohlrogge JB, 48:109-36
 Okita TW, 47:327-50
 O'Leary MH, 47:273-98
 Oliveira IC, 47:569-93
 Oliver DJ, 45:323-37
 Olsen LJ, 46:123-46
 Olsen O-A, 52:233-67
 O'Neill MA, 55:109-39

- Oparka KJ, 51:323-47
 Ort DR, 55:557-94
 Osteryoung KW,
 52:315-33
- P**
 Pagnussat G, 54:109-36
 Palmgren MG, 52:817-45
 Pan D, 46:475-96
 Pantoja O, 47:159-84
 Patrick JW, 48:191-222;
 54:431-54
 Peacock WJ, 49:223-47
 Peeters AJM, 49:345-70
 Peltier G, 53:523-50
 Piñeros MA, 55:459-93
 Plaxton WC, 47:185-214
 Polacco JC, 45:197-209
 Ponomarev M,
 47:477-508
 Post-Beittenmiller D,
 47:405-30
 Prescott AG, 47:245-71
 Price GD, 45:369-92
- Q**
 Öquist G, 54:329-55
- R**
 Rademacher W, 51:501-31
 Raghothama KG, 50:665-93
 Ralph J, 54:519-46
 Randall DD, 53:357-75
 Rappaport F, 53:551-80
 Raskin I, 49:643-68
 Rasmusson AG, 55:23-39
 Ratcliffe RG, 52:499-526
 Rea PA, 49:727-60
 Reinhold L, 50:539-70
 Reith M, 46:549-75
 Rentsch D, 45:447-67
 Richards DE, 52:67-88
 Roberts JA, 53:131-58
 Robertson D, 55:495-519
 Robertson M, 45:113-41
 Rogers A, 55:557-94
 Rogers JC, 47:327-50
- Roje S, 52:119-37
 Ruban AV, 47:655-84
 Ryan PR, 52:527-60
- S**
 Saedler H, 47:23-47
 Salt DE, 49:643-68
 Salvucci ME, 53:449-75
 Santa Cruz S, 51:323-47
 Sasse JM, 49:427-51
 Sato Y, 54:455-68
 Schaefer DG, 53:477-501
 Schäfer E, 53:329-55
 Schardl CL, 55:315-40
 Scheres B, 50:505-37
 Schiefelbein J, 54:403-30
 Schiefelbein JW, 45:25-45
 Schmidt R, 46:395-418
 Schnell DJ, 49:97-126
 Schroeder JI, 52:627-58
 Schuler MA, 54:629-67
 Schumaker KS, 49:501-23
 Schürmann P, 51:371-400
 Schuster W, 45:61-78
 Schwechheimer C,
 49:127-50
 Scolnik PA, 45:287-301
 Sederoff RR, 49:585-609
 Seefeldt LC, 52:269-95
 Sentenac H, 54:575-603
 Serino G, 54:165-82
 Servaites JC, 45:235-56
 Sessa G, 54:23-61
 Shachar-Hill Y, 52:499-526
 Shalitin D, 54:469-96
 Shanklin J, 49:611-41
 Sharkey TD, 52:407-36
 Sheen J, 50:187-217
 Sheng J, 48:27-50
 Shibaoka H, 45:527-44
 Shimamoto K, 53:399-419
 Short TW, 45:143-71
 Simpson CG, 49:77-95
 Sinha N, 50:419-46
 Smalle J, 55:555-90
 Smeekens S, 51:49-81
 Smirnoff N, 52:437-67
- Smith AM, 48:67-87
 Smith H, 46:289-315
 Smith JL, 47:477-508
 Smith RD, 47:101-25;
 49:643-68
 Sonnewald U, 46:341-68
 Soole KL, 55:23-39
 Soppe W, 49:345-70
 Soriano GM, 47:477-508
 Spiering MJ, 55:315-40
 Spreitzer RJ, 53:449-75
 Staehelin LA, 46:261-88
 Staiger CJ, 51:257-88
 Staswick PE, 45:303-22
 Stenmark P, 54:497-517
 Steudle E, 52:847-75
 Stitt M, 46:341-68
 Sugiura M, 48:383-98
 Sun T-p, 55:197-223
 Sussex I, 49:xiii-xxii
 Sussex IM, 47:351-76
 Sussman MR, 45:211-34
 Sze H, 51:433-62
 Szymkowiak EJ, 47:351-76
- T**
 Tabata S, 49:151-71
 Takahashi H, 52:163-210
 Talbot MJ, 54:431-54
 Tanner W, 47:595-626
 Tarun AS, 51:401-32
 Taylor LP, 48:461-91
 Terry N, 51:401-32
 Terzaghi WB, 46:445-74
 Tester M, 53:67-107
 Thomas H, 50:67-95
 Thomashow MF, 50:571-99
 Thomsberry JM, 54:357-74
 Timmermans MCP,
 45:79-112
 Tolbert NE, 48:1-25
 Tomos AD, 50:447-72
 Trapp S, 52:689-724
 Turpin DH, 45:577-607
- U**
 Udvardi MK, 48:493-523

V

- Vanlerberghe GC,
48:703-34
Vaucheret H, 51:167-94
Verma DPS, 52:751-84
Véry A-A, 54:575-603
Vidal J, 47:273-98
Vierstra RD, 55:555-90
Viitanen PV, 45:469-91
Voelker T, 52:335-61
von Arnim A, 47:215-43
Voznesenskaya EV,
55:173-96
Vreugdenhil D,
55:141-72

W

- Wada M, 54:455-68

Walker JC, 47:101-25

- Walters RG, 47:655-84
Waner D, 52:627-58
Wang X, 52:211-31
Wasteneys GO,
54:691-722
Wasternack C, 53:275-97
Watanabe K, 55:537-54
Watts FZ, 45:545-75
Weaver LM, 50:473-503
Weckwerth W, 54:669-89
Werck-Reichhart D,
54:629-67
Whetten RW, 49:585-609
Williams LE, 52:659-88
Winkel BSJ, 55:85-107
Wipf D, 55:341-71
Wood CK, 45:545-75

X

- Xiong J, 53:503-21

Y

- Yamada Y, 45:257-85
Yanofsky MF, 46:167-88
Ye Z-H, 53:183-202
Yeh S, 52:407-36
Yohn CB, 46:147-66
Yokota T, 54:137-64

Z

- Zayed AM, 51:401-32
Zhang H, 47:477-508
Zhu J-K, 51:463-62;
53:247-73
Zielinski RE, 49:697-725
Zourelidou M, 49:127-50

CHAPTER TITLES, VOLUMES 45-55

Prefatory Chapters

Chapters From My Life	J Bonner	45:1-23
Breaking the N•N Bond	RH Burris	46:1-19
Reflections of a Bio-Organic Chemist	J MacMillan	47:1-21
The C ₂ Oxidative Photosynthetic Carbon Cycle	NE Tolbert	48:1-25
Themes in Plant Development	I Sussex	49:xiii-xxii
Educator and Editor	M Gibbs	50:1-25
Fifty Years of Plant Science Was There Really No Place for a Woman?	A Oaks	51:1-16
Fifty Years as a Plant Physiologist	JHM Henderson	52:1-28
Paving the Path	AA Benson	53:1-25
Conjectures, Refutations, and Extrapolations	LT Evans	54:1-21
An Unforeseen Voyage to the World of Phytochromes	M Furuya	55:1-21

Biochemistry and Biosynthesis

Molecular Analysis of Proteins in the Plant Plasma Membrane	MR Sussman	45:211-34
Diurnal Regulation of Photosynthetic Carbon Metabolism in C ₃ Plants	DR Geiger, JC Servaites	45:235-56
Alkaloid Biosynthesis: Molecular Aspects	T Hashimoto, Y Yamada	45:257-85
Molecular Biology of Carotenoid Biosynthesis in Plants	GE Bartley, PA Scolnik, G Giuliano	45:287-301
Storage Proteins of Vegetative Plant Tissues	PE Staswick	45:303-22
The Glycine Decarboxylase Complex from Plant Mitochondria	DJ Oliver	45:323-37
Inhibitors of Photosynthetic Enzymes/Carriers and Metabolism	LA Kleczkowski	45:339-67
The Role of Carbonic Anhydrase in Photosynthesis	MR Badger, GD Price	45:369-92
Auxin-Binding Proteins	AM Jones	45:393-420
The Ribonucleases of Higher Plants	PJ Green	45:421-45

Malate Compartmentalization—Response to a Complex Metabolism	E Martinoia, D Rentsch	45:447-67
Structural and Functional Aspects of Chaperonin-Mediated Protein Folding	AA Gatenby, PV Viitanen	45:469-91
The Use and Characteristics of the Photoacoustic Method in the Study of Photosynthesis	S Malkin, O Canaani	45:493-526
Respiration During Photosynthesis	S Krömer	46:45-70
Regulation of Chloroplast Gene Expression	SP Mayfield, CB Yohn, A Cohen, A Danon	46:147-66
Regulation of Metabolism in Transgenic Plants	M Stitt, U Sonnewald	46:341-68
Starch Synthesis in Maize Endosperms	O Nelson, D Pan	46:475-96
Polysaccharide-Modifying Enzymes in the Plant Cell Wall	SC Fry	46:497-520
Biochemistry and Molecular Biology of the Isoprenoid Biosynthetic Pathway in Plants	J Chappell	46:521-47
14-3-3 Proteins and Signal Transduction	RJ Ferl	47:49-73
Plant Protein Phosphatases	RD Smith, JC Walker	47:101-25
The Functions and Regulation of Glutathione S-Transferases in Plants	KA Marrs	47:127-58
Physiology of Ion Transport Across the Tonoplast of Higher Plants	BJ Barkla, O Pantoja	47:159-84
The Organization and Regulation of Plant Glycolysis	WC Plaxton	47:185-214
Dioxygenases: Molecular Structure and Role in Plant Metabolism	AG Prescott, P John	47:245-71
Phosphoenol/pyruvate Carboxylase: A Ubiquitous, Highly Regulated Enzyme in Plants	R Chollet, J Vidal, MH O'Leary	47:273-98
Biochemistry and Molecular Biology of Wax Production in Plants	D Post-Beittenmiller	47:405-30
Role and Regulation of Sucrose-Phosphate Synthase in Higher Plants	SC Huber, JL Huber	47:431-44
Some New Structural Aspects and Old Controversies Concerning the Cytochrome <i>b6f</i> Complex of Oxygenic Photosynthesis	WA Cramer, GM Soriano, M Ponomarev, D Huang, H Zhang, SE Martinez, JL Smith	47:477-508

Carbohydrate-Modulated Gene Expression in Plants	KE Koch	47:509-40
Chilling Sensitivity in Plants and Cyanobacteria: The Crucial Contribution of Membrane Lipids	I Nishida, N Murata	47:541-68
The Molecular-Genetics of Nitrogen Assimilation into Amino Acids in Higher Plants	H-M Lam, KT Coschigano, IC Oliveira, R Melo-Oliveira, GM Coruzzi	47:569-93
Membrane Transport Carriers	W Tanner, T Caspary	47:595-626
Lipid-Transfer Proteins in Plants	J-C Kader	47:627-54
Regulation of Light Harvesting in Green Plants	P Horton, AV Ruban, RG Walters	47:655-84
The Chlorophyll-Carotenoid Proteins of Oxygenic Photosynthesis	BR Green, DG Durnford	47:685-714
Auxin Biosynthesis	B Bartel	48:51-66
Regulation of Fatty Acid Synthesis	JB Ohlrogge, JG Jaworski	48:109-36
The Oxidative Burst in Plant Disease Resistance	C Lamb, RA Dixon	48:251-75
Biosynthesis and Action of Jasmonates in Plants	RA Creelman, JE Mullet	48:355-81
Aquaporins and Water Permeability of Plant Membranes	C Maurel	48:399-429
Gibberellin Biosynthesis: Enzymes, Genes, and Their Regulation	P Hedden, Y Kamiya	48:431-60
Metabolic Transport Across Symbiotic Membranes of Legume Nodules	MK Udvardi, DA Day	48:493-523
Structure and Membrane Organization of Photosystem II in Green Plants	B Hankamer, J Barber, EJ Boekema	48:641-71
Alternative Oxidase: From Gene to Function	GC Vanlerberghe, L McIntosh	48:703-34
Posttranslational Assembly of Photosynthetic Metalloproteins	S Merchant, BW Dreyfuss	49:25-51
Biosynthesis and Function of the Sulfolipid Sulfoquinovosyl Diacylglycerol	C Benning	49:53-75

Protein Targeting to the Thylakoid Membrane	DJ Schnell	49:97-126
Plant Transcription Factor Studies	C Schweiheimer, M Zourelidou, MW Bevan	49:127-50
Ascorbate and Glutathione: Keeping Active Oxygen Under Control	G Noctor, CH Foyer	49:249-79
Plant Cell Wall Proteins	GI Cassab	49:281-309
Molecular-Genetic Analysis of Plant Cytochrome P450-Dependent Monooxygenases	C Chapple	49:311-43
Photosynthetic Cytochromes <i>c</i> in Cyanobacteria, Algae, and Plants	CA Kerfeld, DW Krogmann	49:397-425
Genes and Enzymes of Carotenoid Biosynthesis in Plants	FX Cunningham Jr, E Gantt	49:557-83
Recent Advances in Understanding Lignin Biosynthesis	RW Whetten, JJ MacKay, RR Sederoff	49:585-609
Desaturation and Related Modifications of Fatty Acids	J Shanklin, EB Cahoon	49:611-41
Molecular Biology of Cation Transport in Plants	TC Fox, ML Guerinot	49:669-96
Calmodulin and Calmodulin-Binding Proteins in Plants	RE Zielinski	49:697-725
ABC Transporters	PA Rea, Z-S Li, Y-P Lu, YM Drozdowicz, E Martinoia	49:727-60
The 1-Deoxy-D-Xylulose-5-Phosphate Pathway of Isoprenoid Biosynthesis in Plants	HK Lichtenhaler	50:47-65
Chlorophyll Degradation	P Matile, S Hörtensteiner, H Thomas	50:67-95
Plant Protein Serine/Threonine Kinases: Classification and Functions	DG Hardie	50:97-131
Cellulose Biosynthesis: Exciting Times for a Difficult Field of Study	DP Delmer	50:245-76
Nitrate Reductase Structure, Function, and Regulation: Bridging the Gap Between Biochemistry and Physiology	WH Campbell	50:277-303
Crassulacean Acid Metabolism: Molecular Genetics	JC Cushman, HJ Bohnert	50:305-32

Photoprotection Revisited: Genetic and Molecular Approaches	KK Niyogi	50:333-59
Enzymes and Other Agents that Enhance Cell Wall Extensibility	DJ Cosgrove	50:391-417
The Shikimate Pathway	KM Herrmann, LM Weaver	50:473-503
CO ₂ -Concentrating Mechanisms in Photosynthetic Microorganisms	A Kaplan, L Reinhold	50:539-70
The Water-Water Cycle in Chloroplasts: Scavenging of Active Oxygen and Dissipation of Excess Photons	K Asada	50:601-39
Phosphate Acquisition	KG Raghothama	50:665-93
Biotin Metabolism in Plants	C Alban, D Job, R Douce	51:17-47
The Chloroplast ATP Synthase: A Rotary Enzyme?	RE McCarty, Y Evron, EA Johnson	51:83-109
Nonphotosynthetic Metabolism in Plastids	MJ Emes, HE Neuhaus	51:111-40
Pathways and Regulation of Sulfur Metabolism Revealed Through Molecular Genetic Studies	T Leustek, MN Martin, J Bick, JP Davies	51:141-66
Diversity and Regulation of Plant Ca ²⁺ Pumps: Insights from Expression in Yeast	H Sze, F Liang, I Hwang, AC Curran, JF Harper	51:433-62
Growth Retardants: Effects on Gibberellin Biosynthesis and Other Metabolic Pathways	W Rademacher	51:501-31
Alkaloid Biosynthesis in Plants: Biochemistry, Cell Biology, Molecular Regulation, and Metabolic Engineering Applications	PJ Facchini	52:29-66
Cytokinin Metabolism and Action	DWS Mok, MC Mok	52:89-118
One-Carbon Metabolism in Higher Plants	AD Hanson, S Roje	52:119-37
Plant Phospholipases	X Wang	52:211-31
Mechanistic Features of the Mo-Containing Nitrogenase	J Christiansen, DR Dean, LC Seefeldt	52:269-95

Molecular Engineering of C ₄ Photosynthesis	M Matsuoka, RT Furbank, H Fukayama, M Miyao	52:297-314
Isoprene Emission from Plants	TD Sharkey, S Yeh	52:407-36
Biosynthesis of Ascorbic Acid in Plants: A Renaissance	N Smirnoff, PL Conklin, FA Loewus	52:437-67
Tonoplast Transporters: Organization and Function	M Maeshima	52:469-97
Plant Mitochondria and Oxidative Stress: Electron Transport, NADPH Turnover, and Metabolism of Reactive Oxygen Species	IM Møller	52:561-91
Photosystem I: Function and Physiology	PR Chitnis	52:593-626
Guard Cell Signal Transduction	JI Schroeder, GJ Allen, V Hugouvieux, JM Kwak, D Waner	52:627-58
Transporters Responsible for the Uptake and Partitioning of Nitrogenous Solutes	LE Williams, AJ Miller	52:659-88
Ribosome-Inactivating Proteins: A Plant Perspective	K Nielsen, RS Boston	52:785-816
Plant Plasma Membrane H ⁺ -ATPases: Powerhouses for Nutrient Uptake	MG Palmgren	52:817-45
New Insights into the Regulation and Functional Significance of Lysine Metabolism in Plants	G Galili	53:27-43
Nonselective Cation Channels in Plants	V Demidchik, RJ Davenport, M Tester	53:67-107
The Lipoxygenase Pathway	I Feussner, C Wasternack	53:275-97
The Complex Fate of α -Ketoacids	BP Mooney, JA Miernyk, DD Randall	53:357-75
Rubisco: Structure, Regulatory Interactions, and Possibilities for a Better Enzyme	RJ Spreitzer, ME Salvucci	53:449-75
Chlororespiration	G Peltier, L Cournac	53:523-50

Structure, Dynamics, and Energetics of the Primary Photochemistry of Photosystem II of Oxygenic Photosynthesis	BA Diner, F Rappaport K-J Dietz	53:551-80 54:93-107
Plant Peroxiredoxins	S Fujioka, T Yokota	54:137-64
Biosynthesis and Metabolism of Brassinosteroids	SG Ball, MK Morell	54:207-33
From Bacterial Glycogen to Starch: Understanding the Biogenesis of the Plant Starch Granule	DA Berthold, P Stenmark W Boerjan, J Ralph, M Baucher	54:497-517 54:519-46
Membrane-Bound Diiiron Carboxylate Proteins	AG Rasmusson, KL Soole, TE Elthon	55:23-39
Lignin Biosynthesis	K Izui, H Matsumura, T Furumoto, Y Kai BSJ Winkel	55:69-84 55:85-107
Alternative NAD(P)H Dehydrogenases of Plant Mitochondria	MA O'Neill, T Ishii, P Albersheim, AG Darvill	55:109-39
Phosphoenol/pyruvate Carboxylase: A New Era of Structural Biology	GE Edwards, VR Franceschi, EE Voznesenskaya RA Dixon	55:173-96 55:225-61
Metabolic Channeling in Plants	JF Harper, G Breton, A Harmon	55:263-88
Rhamnogalacturonan II: Structure and Function of a Borate Cross-Linked Cell Wall Pectic Polysaccharide	S Lalonde, D Wipf, WB Frommer AM Hetherington, C Brownlee P Benveniste	55:341-71 55:401-27 55:429-57
Single-Cell C ⁴ Photosynthesis Versus the Dual-Cell (Kranz) Paradigm	J Smalle, RD Vierstra	55:555-90
Phytoestrogens		
Decoding Ca ²⁺ Signals Through Plant Protein Kinases		
Transport Mechanisms for Organic Forms of Carbon and Nitrogen Between Source and Sink		
The Generation of Ca ²⁺ Signals in Plants		
Biosynthesis and Accumulation of Sterols		
The Ubiquitin 26S Proteasome Proteolytic Pathway		

Genetics and Molecular Biology

The Genetic and Molecular Basis of Root Development	RA Aeschbacher, JW Schiefelbein, PN Benfey	45:25-45
Messenger RNA 3' End Formation in Plants	AG Hunt	45:47-60
The Plant Mitochondrial Genome: Physical Structure, Information Content, RNA Editing, and Gene Migration to the Nucleus	W Schuster, A Brennicke	45:61-78
Geminiviruses and Their Uses as Extrachromosomal Replicons	MCP Timmermans, OP Das, J Messing	45:79-112
Gene Expression Regulated by Abscisic Acid and Its Relation to Stress Tolerance	PM Chandler, M Robertson TW Jacobs	45:113-41 46:317-39
Cell Cycle Control		
Plant Genomes: A Current Molecular Description	C Dean, R Schmidt WB Terzaghi, AR Cashmore	46:395-418 46:445-74
Light-Regulated Transcription		
Molecular Biology of Rhodophyte and Chromophyte Plastids	M Reith	46:549-75
Homology-Dependent Gene Silencing in Plants	P Meyer, H Saedler AB Britt	47:23-48 47:75-100
DNA Damage and Repair in Plants		
The Molecular Basis of Dehydration Tolerance in Plants	J Ingram, D Bartels	47:377-403
Biochemistry and Molecular Biology of Wax Production in Plants	D Post-Beittenmiller	47:405-30
Carbohydrate-Modulated Gene Expression in Plants	KE Koch	47:509-40
Transport of Proteins and Nucleic Acids Through Plasmodesmata	S Ghoshroy, R Lartey, J Sheng, V Citovsky	48:27-50
Chemical Control of Gene Expression	C Gatz	48:89-108
Cyanobacterial Circadian Rhythms	SS Golden, M Ishiura, CH Johnson, T Kondo	48:327-54
Plant In Vitro Transcription Systems	M Sugiura	48:383-98
Plant Disease Resistance Genes	KE Hammond-Kosack, JDG Jones	48:575-607

Splice Site Selection in Plant Pre-mRNA Splicing	JWS Brown, CG Simpson	49:77-95
Lessons from Sequencing of the Genome of a Unicellular Cyanobacterium, <i>Synechocystis</i> Sp. PCC6803	H Kotani, S Tabata EJ Finnegan, RK Genger, WJ Peacock, ES Dennis	49:151-71 49:223-47
DNA Methylation in Plants		
Nuclear Control of Plastid and Mitochondrial Development in Higher Plants	P León, A Arroyo, S Mackenzie	49:453-80
C4 Gene Expression (Trans)Gene Silencing in Plants: How Many Mechanisms?	J Sheen	50:187-217
Cereal Chromosome Structure, Evolution, and Pairing	M Fagard, H Vaucheret	51:167-94
<i>Chlamydomonas</i> as a Model Organism	G Moore	51:195-222
Molecular Genetics of Auxin Signaling	EH Harris	52:363-406
Rice as a Model for Comparative Genomics of Plants	O Leyser	53:377-98
	K Shimamoto, J Kyozuka	53:399-419
A New Moss Genetics: Targeted Mutagenesis in <i>Physcomitrella patens</i>	DG Schaefer	53:477-501
Complex Evolution of Photosynthesis	J Xiong, CE Bauer	53:503-21
The COP9 Signalosome: Regulating Plant Development Through the Control of Proteolysis	G Serino, X-W Deng	54:165-82
Structure of Linkage Disequilibrium in Plants	SA Flint-Garcia, JM Thornsberry, ES Buckler IV	54:357-74
Functional Genomics of P450s	MA Schuler, D Werck-Reichhart	54:629-67
DNA Methylation and Epigenetics	J Bender	55:41-68
Naturally Occurring Genetic Variation in <i>Arabidopsis Thaliana</i>	M Koornneef, C Alonso-Blanco, D Vreugdenhil	55:141-72
Plastid Transformation in Higher Plants	P Maliga	55:289-313
Visualizing Chromosome Structure/Organization	E Lam, N Kato, K Watanabe	55:537-54

Cell Differentiation

Plant Hormone-Induced Changes in the Orientation of Cortical Microtubules: Alterations in the Cross-Linking Between Microtubules and the Plasma Membrane	H Shibaoka AL Moore, CK Wood, FZ Watts	45:527-44 45:545-75
Protein Import into Plant Mitochondria		
Integration of Carbon and Nitrogen Metabolism in Plant and Algal Cells	HC Huppe, DH Turpin	45:577-607
Endocytosis in Plants	PS Low, S Chandra	45:609-31
Peroxisomes and Their Assembly in Higher Plants	LJ Olsen, JJ Harada	46:123-46
The Plant Golgi Apparatus: Structure, Functional Organization, and Trafficking Mechanisms	LA Staehelin, I Moore	46:261-88
Physiology of Ion Transport Across the Tonoplast of Higher Plants	BJ Barkla, O Pantoja	47:159-84
Xylogenesis: Initiation, Progression, and Cell Death	H Fukuda	47:299-325
Compartmentation of Proteins in the Endomembrane System of Plant Cells	TW Okita, JC Rogers	47:327-50
Structure and Biogenesis of the Cell Walls of Grasses	NC Carpita AM Smith, K Denyer, C Martin	47:445-76 48:67-87
The Synthesis of the Starch Granule	LP Taylor, PK Hepler	48:461-91
Pollen Germination and Tube Growth	JT Greenberg	48:525-45
Programmed Cell Death in Plant-Pathogen Interactions	SD O'Neill	48:547-74
Pollination Regulation of Flower Development	MMS Evans, MK Barton	48:673-701
Genetics of Angiosperm Shoot Apical Meristem Development	CS Gasser, J Broadvest, BA Hauser	49:1-24
Genetic Analysis of Ovule Development	RK Dawe	49:371-95
Meiotic Chromosome Organization and Segregation in Plants	KS Schumaker, MA Dietrich	49:501-23
Hormone-Induced Signaling During Moss Development	U-I Flügge JA Banks N Sinha B Scheres, PN Benfey	50:27-45 50:163-86 50:419-46 50:505-37
Phosphate Translocators in Plastids		
Gametophyte Development in Ferns		
Leaf Development in Angiosperms		
Asymmetric Cell Division in Plants		

Signaling to the Actin Cytoskeleton in Plants	CJ Staiger	51:257-88
Cytoskeletal Perspectives on Root Growth and Morphogenesis	PW Barlow, F Baluška	51:289-322
Circadian Rhythms in Plants	CR McClung	52:139-62
Endosperm Development: Cellularization and Cell Fate Specification	O-A Olsen	52:233-67
The Plastid Division Machine	KW Osteryoung, RS McAndrew	52:315-33
Cytokinesis and Building of the Cell Plate in Plants	DPS Verma	52:751-84
Shoot and Floral Meristem Maintenance in <i>Arabidopsis</i>	JC Fletcher	53:45-66
Vascular Tissue Differentiation and Pattern Formation in Plants	Z-H Ye	53:183-202
The Plant Cell Cycle	W Dewitte, JAH Murray	54:235-64
How Do Cells Know What They Want To Be When They Grow Up? Lessons from Epidermal Patterning in <i>Arabidopsis</i>	JC Larkin, ML Brown, J Schiefelbein	54:403-30
Transfer Cells: Cells Specialized for a Special Purpose	CE Offler, DW McCurdy, JW Patrick, MJ Talbot	54:431-54
Molecular Mechanisms and Regulation of K ⁺ Transport in Higher Plants	A-A Véry, H Sentenac	54:575-603
Remodeling the Cytoskeleton for Growth and Form: An Overview with Some New Views	GO Wasteneys, ME Galway	54:691-722
Tissue, Organ, and Whole Plant Events		
The Transduction of Blue Light Signals in Higher Plants	TW Short, WR Briggs	45:143-71
Cytokinin Accumulation and Action: Biochemical, Genetic, and Molecular Approaches	AN Binns	45:173-96
PPFMs and Other Covert Contaminants: Is There More to Plant Physiology than Just Plant?	MA Holland, JC Polacco	45:197-209
Taxol	PF Heinstein, C-j Chang	45:663-74

Molecular Genetics of Sexuality in <i>Chlamydomonas</i>	UW Goodenough, EV Armbrust, AM Campbell, PJ Ferris	46:21-44
Genetic Control and Integration of Maturation and Germination Pathways in Seed Development	DR McCarty	46:71-93
Calcium Regulation in Plant Cells and its Role in Signaling	DS Bush	46:95-122
Floral Meristems to Floral Organs: Genes Controlling Early Events in <i>Arabidopsis</i> Flower Development	MF Yanofsky	46:167-88
Chemoperception of Microbial Signals in Plant Cells	T Boller	46:189-214
Apoplastic Water and Solute Movement: New Rules for an Old Space	MJ Canny	46:215-36
Cellular Mechanisms of Aluminum Toxicity and Resistance in Plants	LV Kochian	46:237-60
Molecular Genetics of Plant Embryogenesis	DW Meinke A von Arnim, X-W Deng	46:369-94 47:215-43
Light Control of Seedling Development	EJ Szymkowiak, IM Sussex	47:351-76
What Chimeras Can Tell Us About Plant Development	I Nishida, N Murata	47:541-68
Chilling Sensitivity in Plants and Cyanobacteria: The Crucial Contribution of Membrane Lipids	MD Marks	48:137-63
Molecular Genetic Analysis of Trichome Development in <i>Arabidopsis</i>	JW Patrick	48:191-222
Phloem Unloading: Sieve Element Unloading and Post-Sieve Element Transport	MC Drew	48:223-50
Oxygen Deficiency and Root Metabolism: Injury and Acclimation Under Hypoxia and Anoxia	JJ Kieber	48:277-96
The Ethylene Response Pathway in <i>Arabidopsis</i>	DF Mandoli J Giraudat, J Leung	49:173-98 49:199-222
Elaboration of Body Plan and Phase Change During Development of <i>Acetabularia</i> : How is the Complex Architecture of a Giant Unicell Built?		
Abscisic Acid Signal Transduction		

Genetic Control of Flowering Time in <i>Arabidopsis</i>	M Koornneef, C Alonso-Blanco, AJM Peeters, W Soppe	49:345-70
Brassinosteroids: Essential Regulators of Plant Growth and Development	SD Clouse, JM Sasse	49:427-51
Boron in Plant Structure and Function	DG Blevins, KM Lukaszewski	49:481-500
Evolution of Light-Regulated Plant Promoters	G Argüello-Astorga, L Herrera-Estrella	49:525-55
Phytoremediation	DE Salt, RD Smith, I Raskin	49:643-68
Genetic Analysis of Hormone Signaling	P McCourt	50:219-43
Molecular and Cellular Aspects of the Arbuscular Mycorrhizal Symbiosis	MJ Harrison	50:361-89
Plant Cold Acclimation: Freezing Tolerance Genes and Regulatory Mechanisms	MF Thomashow	50:571-99
Silicon	E Epstein	50:641-64
Roots in Soil: Unearthing the Complexities of Roots and Their Rhizospheres	ME McCully	50:695-718
Sugar-Induced Signal Transduction in Plants	S Smeekens	51:49-81
Selenium in Higher Plants	N Terry, AM Zayed, MP de Souza, AS Tarun	51:401-32
How Gibberellin Regulates Plant Growth and Development: A Molecular Genetic Analysis of Gibberellin Signaling	DE Richards, KE King, T Ait-ali, NP Harberd	52:67-88
Function and Mechanism of Organic Anion Exudation from Plant Roots	PR Ryan, E Delhaize, DL Jones	52:527-60
Defensive Resin Biosynthesis in Conifers	S Trapp, R Croteau	52:689-724
Molecular Biology of Fruit Maturation and Ripening	J Giovannoni	52:725-49
The Cohesion-Tension Mechanism and the Acquisition of Water by Plant Roots	E Steudle	52:847-75
Abscission, Dehiscence, and Other Cell Separation Processes	JA Roberts, KA Elliott, ZH Gonzalez-Carranza	53:131-58

Phytochelatins and Metallothioneins: Roles in Heavy Metal Detoxification and Homeostasis	C Cobbett, P Goldsborough	53:159-82
Local and Long-Range Signaling Pathways Regulating Plant Responses to Nitrate	BG Forde	53:203-24
Acclimative Response to Temperature Stress in Higher Plants: Approaches of Gene Engineering for Temperature Tolerance	K Iba	53:225-45
Salt and Drought Stress Signal Transduction in Plants	J-K Zhu	53:247-73
Plant Responses to Insect Herbivory: The Emerging Molecular Analysis	A Kessler, IT Baldwin	53:299-328
Phytochromes Control Photomorphogenesis by Differentially Regulated, Interacting Signaling Pathways in Higher Plants	F Nagy, E Schäfer	53:329-55
Root Gravitropism: An Experimental Tool to Investigate Basic Cellular and Molecular Processes Underlying Mechanosensing and Signal Transmission in Plants	K Boonsirichai, C Guan, R Chen, PH Masson	53:421-47
Understanding the Functions of Plant Disease Resistance Proteins	GB Martin, AJ Bogdanove, G Sessa	54:23-61
Protein Phosphatases in Plants	S Luan	54:63-92
Nitric Oxide: The Versatility of an Extensive Signal Molecule	L Lamattina, C García-Mata, M Graziano, G Pagnussat	54:109-36
Phospholipid-Based Signaling in Plants	HJG Meijer, T Munnik	54:265-306
Gibberellins and Flowering of Grasses and Cereals: Prizing Open the Lid of the "Florigen" Black Box	RW King, LT Evans	54:307-28
Cryptochrome Structure and Signal Transduction	C Lin, D Shalitin	54:469-96
Perception and Signal Transduction of Cytokinins	T Kakimoto	54:605-27
Symbioses of Grasses with Seedborne Fungal Endophytes	CL Schardl, A Leuchtmann, MJ Spiering	55:315-40

Reactive Oxygen Species: Metabolism,
Oxidative Stress, and Signal
Transduction

K Apel, H Hirt

55:373-99

Acclimation and Adaptation

Photoinhibition of Photosynthesis in
Nature

SP Long,
S Humphries,
PG Falkowski

45:633-62

Physiological and Ecological Function

Within the Phytochrome Family

H Smith

46:289-315

The Molecular Basis of Dehydration

Tolerance in Plants

J Ingram, D Bartels

47:377-403

Plant Transformation: Problems and
Strategies for Practical Application

RG Birch

48:297-326

More Efficient Plants: A Consequence of
Rising Atmospheric CO₂?

BG Drake,
MA González-Meler,
SP Long

48:609-39

Improving the Nutrient Composition of
Plants to Enhance Human Nutrition and
Health

MA Grusak,
D DellaPenna

50:133-61

Macronutrient Utilization by
Photosynthetic Eukaryotes and the
Fabric of Interactions

A Grossman,
H Takahashi

52:163-210

Variations in the Biosynthesis of
Seed-Storage Lipids

T Voelker, AJ Kinney

52:335-61

Revealing the Molecular Secrets of Marine
Diatoms

A Falciatore,

C Bowler

53:109-30

Iron Transport and Signaling in Plants

C Curie, J-F Briat

54:183-206

Photosynthesis of Overwintering
Evergreen Plants

G Öquist,

NPA Huner

54:329-55

Chloroplast Movement

M Wada, T Kagawa,

Y Sato

54:455-68

How Do Crop Plants Tolerate Acid Soils?
Mechanisms of Aluminum Tolerance
and Phosphorous Efficiency

L Kochian,

OA Hoekenga,

MA Piñeros

55:459-93

Genetic Regulation of Time to Flower in
Arabidopsis Thaliana

Y Komeda

55:521-35

**Rising Atmospheric Carbon Dioxide:
Plants FACE the Future**

**SP Long,
EA Ainsworth,
A Rogers,
DR Ort**

55:557-94

Methods

**Heterologous Expression of Genes in
Bacterial, Fungal, Animal, and Plant
Cells**

**WB Frommer,
O Ninnemann**

46:419-44

**Fluorescence Microscopy of Living Plant
Cells**

S Gilroy

48:165-90

**The Pressure Probe: A Versatile Tool in
Plant Cell Physiology**

**AD Tomos, RA Leigh
RG Ratcliffe,
Y Shachar-Hill**

50:447-72

52:499-526

Probing Plant Metabolism with NMR

Single-Nucleotide Mutations for Plant

**S Henikoff, L Comai
W Weckwerth**

54:375-401

54:669-89

Functional Genomics

Metabolomics in Systems Biology

**VIGS Vectors for Gene Silencing: Many
Targets, Many Tools**

D Robertson

55:495-519